

**From:** [Bird, Patrick](#)  
**To:** [Peter Barba](#)  
**Subject:** RE: Previous Determination Letter  
**Date:** Friday, November 21, 2014 8:15:00 AM

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Hi Peter,

Thanks for following up. It was great meeting with you on Wednesday. I'll forward your email and attachment to Marcia and Charlene. We'll be discussing this internally, but I'm not sure on our timing. I'd like to schedule a follow with, at a minimum, you and me sometime in early January. I may not have specific guidance at that point, but I should be able to provide you with insight on our progress. Let me know your thoughts.

Pat

Patrick Bird

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**From:** Peter Barba [<mailto:peterbarba17@gmail.com>]

**Sent:** Thursday, November 20, 2014 10:29 AM

**To:** Bird, Patrick

**Subject:** Previous Determination Letter

Hi Pat,

Thanks for bringing everyone together for yesterday's meeting to review our pyrolysis unit description. It was beneficial to get some feedback on how this would be looked at in a formal request for Determination.

As I noted in our discussion, we developed a batch pyrolysis unit for medical waste destruction back in 1999. The first unit we built has been in operation for 14 years and processes all the pathological and chemotherapy waste in the State of Hawaii. The 1999 letter we received from the EPA for our request for determination of our batch Pyolysis unit is attached. As I reviewed it I thought it was important to see that they considered three points critical to confirm the unit design as Pyrolysis and thus exempt from HMIWI.

1. "First, pyrolysis technology is an endothermic reaction (absorbs heat) while combustion is an exothermic reaction (releases heat)."
2. "Second, pyrolysis occurs in the presence of an insignificant amount of oxygen."
3. "Third and finally, pyrolysis has an external energy source."

Rick Copeland and others from the EPA, who were instrumental in developing the HMIWI regulations, were helpful throughout our work so that we would have a system to effectively process medical waste while being fully in compliance with exemption requirements of the HMIWI regulations.

The pyrolysis process with its better control and lower emissions has proven to be a beneficial process for medical waste processing.

Please note that the letter is addressed to Environmental Techniques, Inc. which is the company I had that did the development work on the batch pyrolysis unit. Our new company, Ressani Technologies has been established to develop the next generation of pyrolysis

destruction of medical waste.

Again, please thank everyone from yesterday's meeting for their beneficial comments on our new, continuous, pyrolysis unit design.

Peter

Peter Barba

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